

**A critical analysis of the design and implementation of formative assessment.**

**Abstract:**

The objectives of this article are to critically analyse the impact of formative and summative assessment in an informal secondary school environment. The informality reflects the work of The Anne Frank Trust UK and their practices in evaluating student progress through a two-week workshop programme. The preference for formative assessment is strongly manifested throughout this article whilst simultaneously exploring the shortfalls and disapproval of summative assessment. A large focus on institutionalisation and the assumptions of hierarchy within education systems shines through this article resulting in the application of sociological theory. Recommendations were made to The Anne Frank Trust UK on how to better implement peer assessment and to schools and policy-makers on recognising the importance of both formative and summative assessment as a route to progression and development in subject learning.

**A critical analysis of the design and implementation of formative assessment.**

Throughout this essay, I will be discussing the design and implementation of formative assessments. I will discuss the underlying purposes of assessment in education and briefly compare this with summative assessments. I have previously undertaken work in this area in relation to my professional practice. Therefore, I will refer to my own examples of practising formative assessment with the Anne Frank Trust UK. Furthermore, I will integrate ideas surrounding learning theory, pedagogy, sociological theory and the politicisation of education institutions.

There are many different types and forms of assessment. The most common forms that are adopted in educational settings are summative and formative. A summative assessment can be described as the end result of a learning process in which certification is a major component. This is often referred to as 'Assessment *of* Learning' (AoL) and can help determine whether students have met learning targets. Formative assessment contrasts to this as it can be defined as 'Assessment *for* Learning' (AfL) (NASUWT, 2012). Formative assessment is often "built into the learning process" (ARG, 2009, p9) and encourages enhancement of learning through feedback from teachers (Johnson and Jenkins, 2009). The definition of formative assessment is crucial to the importance of documenting effectiveness (Bennett, 2011, p8). In order to record the success of using this type of assessment each teacher must know how to implement it correctly. This is because "the distinguishing characteristic is when results of the formative are used to adapt the teaching to meet the student's needs" (Bennett, 2011, p6).

Formative assessment in an education setting is primarily used to understand the progress of the children involved. It can have an abundance of uses, however, all assessments have not been individually and specifically designed to suit these uses. Fullan and Langworthy (2014, p1) argue that educational institutions are designed for "purposes of an earlier, mass production, industrial era" and so the styles and forms of assessment must change along with the pedagogies to become more appropriate. The Assessment Reform Group (ARG, 2009, p9) state that there are three main purposes of assessment. These are to "help build pupils understanding, to provide information of pupil's achievements to those on the outside and to hold individuals and institutions to account". Another strong characteristic and purpose of assessment not mentioned by ARG (2009) is that it

often enables teachers to monitor their student's current knowledge and establish a level that they are working at. This can also be helpful for future reference so that the teachers are then able to review the progress of the students from their previous assessments. Klenowski and Wyatt-Smith (2014, p36) state that teachers assess students "to identify what they have learned, what they have not learned and where they are experiencing difficulty". This is advantageous for the creation of lesson plans and teaching materials from my own experience as the assessment helps the teacher understand each student's levels of understanding.

My work at the Anne Frank Trust UK uses both types of formative and summative assessment. However, the primary and most encouraged type is formative assessment. The Trust aims to educate children about the Holocaust, challenge prejudice and encourage involvement in taking a stand (Annefrank.org.uk, 2016). This takes place during a two-week programme within schools. During this, children are given two formative assessments, one at the start of the workshop and one near the end. The assessment at the start of the workshop is to assess the current knowledge of students in order to construct a workshop that is applicable to all students and to develop their knowledge further. This is widely known as a performance-based prior knowledge assessment. Birenbaum & Dochy (1996) state that by observing current levels of knowledge, this can facilitate the further learning process and enables teachers to construct 'learning profiles'. Although learning and assessment has significantly moved on in society and in pedagogy since the 1990's, this literature still remains applicable to learning. Familiarising prior knowledge of students is crucial to learning programmes and according to Wiliam (2011, p3) "the most important factor influencing learning is what the learner already knows."

The second assessment given by the Anne Frank Trust is also formative to assess what the students have learned throughout the workshop. This is to see whether the workshops are proving beneficial for the students and to measure quality assurance by evaluating whether staff at the Anne Frank Trust are completing their job effectively. This is formative because the educators are encouraged to engage with the students and give feedback on their work so that the students can see what areas they need to improve on. "Teaching guided by formative assessment allows the student to focus on the learning they need to derive from their particular subject area" (Jacoby *et al*, 2014, p73). By using this type of assessment and encouraging feedback, this identifies gaps in the students' knowledge and encourages improvement.

The workshops are followed by a summative assessment in the form of a quiz and evaluation forms to assess quality assurance and keep the workshops running in schools. This process will then happen again in a different school. I believe that this education programme would follow Wheeler's cyclical curriculum model as it is an ongoing process in various schools and continuous with the structure. Yorke (2007) suggests three reasons to assess. To use as an example, I believe the Anne Frank Trust incorporates all three. The first reason indicated is to provide a good purpose for learning and using formative assessments to diagnose strengths and weaknesses. The second reason to assess is to use certification as a token to progress further, in this informal instance, students can progress and become ambassadors for the charity. The final reason Yorke gives for assessing is for quality assurance. This is to monitor levels of achievement over time and "provide feedback to teachers regarding personal effectiveness" (Yorke, 2007, p9).

Harlen and James (2006) argue that the purpose of both formative and summative assessment has

been lost in education and as a result fails to play a role in the learning process. They state that there is “little genuine formative assessment” and consequently children are not exposed to the information that is needed for them to progress. Coffey *et al* (2011) would agree with this as they offer a critique of formative assessment. They state that strategies to help enforce formative assessment cut across topics and disciplines and do not focus on students specific thinking, in turn leading the student to become unclear about their answers. The idea that formative assessment lacks disciplinary substance for students can be overcome with the use of feedback and one to one sessions with the student to settle any concerns from either the teacher or the student. This will be further discussed later on. The ability to progress is a key aspect in formative assessment as it enables children to subsequently focus on the preparation for their summative assessment. The term ‘diagnostic appraisal’ is used by Rowntree (1987) who puts forward an idea for the purpose of formative assessment. According to him, “ascertaining strengths and weaknesses” is one of the most important elements of the teacher/pupil relationship. This is because when this information emerges, it allows educators to claim that they are teaching. Rowntree argued that diagnostic appraisal paired with pedagogic judgements can lead the student and teacher towards the question of “what to progress in next?” Furthermore, this leads to new desirable areas of development for children (Rowntree, 1987, p4).

Formative assessment and its concept relates directly to Vygotsky’s theory of the Zone of Proximal Development (ZPD). This is due to the feedback that is given to the students which could encourage the desire for further learning. In the ZPD, learning is going “beyond an individual’s current level of development and oriented to emerge abilities to maximally impact and guide development” (Poehner, 2011, p1). It is often put into practice in education when inadequate knowledge leads to students desiring to learn more. Echoing this, an idea put forward by Garhart Mooney (2000, p62) suggests that “children learn only when their curiosity is not fully satisfied.” This further supports the idea of ZPD in relation to formative assessment as it enables children to be aware of their shortcomings and how to constructively work on them to become more successful. So much so, that Poehner (2011) states that the ZPD offers a target for teaching and assessment through the interrelation of these aspects. This may not always lead to successful results, however, encouragement of learning through even one social interaction can be powerful for development.

Feedback from formative assessments can be written and verbal. It is the role of the feedback rather than the type of feedback that is of the most importance in relation to improving students learning. According to Rowntree (1987, p24) “feedback or knowledge of results is the life-blood of learning” and is pivotal to further development. The feedback is intended to be an incentive for children to want to gain more knowledge through the ZPD and it also provides a “window of opportunity” for children to achieve their goals in certain subjects rather than maintain their current grade (Jacoby *et al*, 2014, p74). Rowntree (1987, p24) also states that feedback is important for students and “begins to become useful when it includes verbal comments”. This is so that the students can fully engage with the teachers comments and have the opportunity to verbalise some of their own concerns. A good example of this occurs within my professional practice. All feedback is given both in written and oral form so that the students are made aware of the areas that they are excelling in and areas for improvement. The written feedback is given first to enable the students to come to terms with how well they have succeeded in their knowledge of the Holocaust.

This is then followed by individual tutorials with each child so that they can converse with the educator how they feel about their progress, what is going well and what areas can be developed. As Black (2010) argues, “talk is arguably the true foundation of learning” and ample communication concerning feedback is almost always effective regarding progression. Following tutorials are peer sessions enabling children to enhance each other’s knowledge through communication. The ZPD is also linked in here and it has proven to be an effective pedagogical approach through my professional practice. De Guerrero and Villamil (2002) state that the zone of proximal development “serves a basis for peer collaboration” and therefore can be used in many instances to help benefit others. There are many children that improve from this process and consequently their pass rate increases. Almost all of the ambassadors at the charity agree that feedback is one of the most important things to them regarding schooling. Many ambassadors are familiar with the terms ‘What Went Wrong’ (WWW) and ‘Even Better If’ (EBI) being included in their work both in school and within the Anne Frank Programme. Although, around half of them believe that teachers do not incorporate these expressions enough, meaning their progression and development is limited.

By encouraging verbal feedback as well as written it encourages more interaction between the teacher and pupil, leading to a great rapport. O’Connor (2010, p2) suggested that “high quality teacher-child relationships” contribute to the development of children’s social and cognitive skills. This could be helpful when regarding assessment as children may aspire to progress from their current grade due to the feedback from their formative assessment. Prof Black (2010) argues that formative assessments are anti-passive and both the learner and teacher must be involved in order for it to be utilised successfully. This is extremely different to summative as formative enables progression and encourages an authentic learning process. Summative, however, can be construed as learning without understanding due to simply relaying information with the solid ambition of certification (Harlen and James, 2006). This is often known as the surface approach to learning in which lower cognitive level learning activities are used to achieve objectives (Biggs and Tang, 2011).

Communication between teachers and students is not the only important aspect of feedback and learning. Peer communication is also a key aspect as Black (2010) points out. When gaining feedback from teachers, there is encouragement for students to start comparing their strengths and weaknesses with each other. This motivates communication between students and helps them become learning resources for one another. It also further encourages activation of students as owners of their own learning. This again, relates to the ZPD being employed as a pedagogy for peer learning. However, a widely-assumed critique of using peer feedback according to Gielen *et al* (2010) is that in many instances students do not justify their reasoning for criticism as teachers would and therefore this leaves the student without room for progression.

Sociological theory can also be applied to learning and assessment. This can be applied when concerning the structure of both the education system and society itself. Sullivan (2001) states that cultural capital is integrated into education institutions by the institutions assuming ownership. This presumes that all children within the education system have “the ability to understand and use educated language”. This isolates the low achieving students in school and limits their progression due to what Bernstein (1964) describes as their ‘restricted code’. This is known as a simple descriptive way of conversing with limited vocabulary as opposed to more analytical and detailed vocabulary. The students restricted code according to Bernstein (1964) could also link in with their socio-economic background as it is commonly associated with working class individuals. The

education system is often described as possessing an 'elaborate code' and therefore takes a particularistic approach when it assumes all children share the same understanding of vocabulary. This would again, disadvantage lower achievers.

Although there is much criticism of Bernstein's ideas of sociolinguistic theory as it fails to recognise the diversity of speech and differences between students, it can still be applicable to formative assessments (Labov, 1973). Formative assessment, however, challenge this cultural capital by providing support to all students, both with restricted and elaborate code. This enables progression for low achievers through feedback and can be argued to encourage this more than any other type of assessment.

There are also political aspects that can affect learning and assessment along with the sociological aspects affecting language and success rates. Holding knowledge of education policy enables a critical insight into the education system. This is because education is a political activity that was originally shaped by policy aimed at an industrialised society post 1870 Education Act (UK Parliament, 2016). The politicisation of education has emerged many constraints within the education system that disenable teachers to teach content that could be beneficial to students. One of these is the National Curriculum and the expectations of summative assessments aligned to this. The government guidelines state that "teachers should not use the national test frameworks to guide teaching and learning" (Gov.uk, 2016). However, many different research papers have identified that teachers feel pressured into doing so (Milner, 2013). The curriculum imposes national tests that are judged by norm-referencing which compares the student's responses to those of an average student (Lok, McNaught and Young, 2015). Depending on how similar their responses are to the average student, this then determines their grade and level and informs the teacher, the pupil and the parents whether or not the child has reached their educational milestones. This could affect the teaching styles as teachers may opt for the 'teaching to the test' approach and follow a strict guideline of educational content (Milner, 2013). Therefore, as a critique of education policy surrounding standardized testing of the national curriculum, Bennett (2011) argues that "formative approaches should be conceptualised as part of a comprehensive system in which all components work together to facilitate learning". This, meaning that formative assessments should be weaved into the national testing policies in order to value progression and marry testing with a deeper learning process.

Jacoby (2013) states that formative assessment is disregarded by many academic staff in an educational setting such as a school because of the busy schedule and tight curriculum targets. She suggests that this form of assessing may be viewed as non-resourceful and protractive. This is not a problem for my work at The Anne Frank Trust as it is introduced to students as an informal programme and so does not have an end result of formal certification that will enable them to continue onto another education programme. This enables us to work with flexibility with the students and encourage more formatives due to possessing the luxury of time and resources. However, within schools, due to the government policies surrounding the national curriculum and compulsory testing, the schools do not possess this luxury as they must focus on the end result. External regimes surrounding policy have been found to have an effect on how teachers address the national curriculum and assessment as a pair (Harrison et al, 2010). Summative assessment is most important in education when considering the next step into progression. It can enable a move to further education which in turn can lead to better job prospects and can also shape the lives of

people as “individuals in society are constructed by assessment. This is known as constructive dialogue” (Stobart, 2008, p71).

Bowles and Gintis (1976) state that schools evolve to meet the needs of employers by providing them with workers for their labour force. This is a design made more for industrialisation rather than in today’s society. Pedagogies along with teaching and learning styles and types of assessment need to change along with societal elements such as the move from industrialisation to post-modernism. This reiterates a previous point made by Fullan and Langworthy (2014) surrounding the ideas of our current education system being designed for an industrial era.

In today’s society, more commonly affecting education and assessment is neoliberalism. For over thirty years “education has been a target of neoliberal reform” (Slater, 2015, p1). This is a “dominant ideology that shapes our world today” (Saad-Filho and Johnston, 2005). It primarily focusses on restricting and reducing costs on public expenditure. Therefore, assessment can be viewed in a neoliberalist point of view as marketing for profit. When looking through a neoliberalist lens, pupils can be viewed as consumers of an education service. This is impacting on the overall culture of education and the reputation of the learning process. New managerialism was introduced as a mechanism for implementing neo-liberalism policies within education. Organisations that treat education as transactional tend to ignore the learning processes of education which can in turn produce inequalities in both education and society. Ball (2009, p84) states that “privatisation is a key strategy in education reform”. Due to this, the “private actors”, as opposed to the state control what occurs in the institution (Right to Education Project, 2016). As a result, efficiency is prioritised over equality and so the least functioning members of the market, otherwise known as the low achievers would fall victim to the new managerialism. It has been known to alter the dynamics within schools and this significantly impacts assessment, how children respond to it and the quality assurance of the assessment. This is a profound factor when concerning certification of education as transactional (Pratt, 2016).

Assessment has the power to help students “create identities both as people and as learners” (Stobart, 2008, p71). Students learn through assessment at the Anne Frank Trust by developing skills such as higher order thinking skills, softer skills, empathy, morals and emotional intelligence. According to Stobart, this “counts for more in the real world than our IQ’s” and so can significantly help children in later life (Stobart, 2008, p67). These are all elements that are not assessed through grading, yet are important to the process of learning about such a sensitive topic such as the Holocaust. Teaching a topic such as this is also a reminder for the teachers involved that there are distinct “group and cultural differences” within the classroom. In order to be fair with formative assessments, this must be taken into account when giving feedback. (Klenowski and Wyatt Smith, 2014, p38). Biggs and Tang (2011) promote education as being about conceptual change and this should be encouraged with the involvement of policies, pedagogies and a focus on the development of the student’s sense of self in terms of emotional intelligence.

In conclusion, I feel that the design and implementation of formative assessment is far better suited to a deeper learning process than summative assessment. I have found that due to political constraints many education institutions may disregard the idea of formative assessments as time wasting or unimportant due to the focus being on summative assessments and the end result. However, there is sufficient evidence to state that feedback is crucial and desirable to the students

enabling them to dig deeper than simply a surface approach to learning. I feel that new pedagogies that could be applied to this style of teaching and assessment should be welcomed in all education settings and be introduced as compulsory.

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